

IN THE CLAIMS:

Please amend claims as set forth below:

1 – 56. (Canceled)

57. (Amended) A method for modulating the immune response in a mammal to an antigen by implanting within the body of said mammal a device comprising a porous matrix for containing said antigen [and further comprising] within a container having a means for limiting the passive diffusion of molecules out of said device without limiting the active movement of immune cells into or out of said device.

58. (New) The method of claim 57 wherein said antigen is bioavailable within said porous matrix at the time of implantation of said device into said mammal.

59. (New) The method of claim 57 wherein said antigen becomes bioavailable within said porous matrix after the device has been implanted in said mammal.

60. (New) The method of claim 59 where said antigen becomes bioavailable about three days after the device has been implanted in said mammal.

61. (New) The method of claim 57 wherein said antigen is introduced into said device about three days after the device has been implanted in said mammal.

62. (New) The method of claim 57 wherein said antigen is provided in a delayed release formulation.

63. (New) The method of claim 57 wherein said porous matrix comprises a polymeric material.

64. (New) The method of claim 63 wherein said polymeric material is selected from the group consisting of natural sources and synthetic sources.

65. (New) The method of claim 63 wherein said polymeric material is

selected from the group consisting of hydroxylated polyvinyl acetate, ethylene/vinyl acetate copolymer, polylactic acid, polylactide-glycolide copolymer, polyurethane, gelatin, collagen, cross-linked collagen and combinations thereof.

66. (New) The method of claim 57 wherein said container comprises a segment of tubing.

67. (New) The method of claim 57 wherein said container comprises a perforated but otherwise impermeable coating.

68. (New) The method of claim 67 wherein said coating comprises a polymeric material.

69. (New) The method of claim 68 wherein said polymeric material is selected from the group consisting of natural sources and synthetic sources.

70. (New) The method of claim 68 wherein said polymeric material is selected from the group consisting of cross-linked collagen, polylactic acid, polylactide-glycolide copolymer, polyethylene, silicone, latex resin, polystyrene, acrylic resin, polyvinylpyrrolidone, and combinations thereof.

71. (New) The method of claim 57 wherein the porous matrix comprises hydroxylated polyvinyl acetate and the container comprises a segment of tubing having sealed ends and wall perforations, open ends with wall perforations, or open ends.

72. (New) The method of claim 57 wherein said device is removed from the body of said mammal after a period of about 10 days.

73. (New) The method of claim 57 wherein a second quantity of said antigen is reintroduced into said device.

74. (New) The method of claim 57 wherein the quantity of antigen and the timing of the bioavailability of said antigen within said device relative to the time of implantation of said device into said mammal results in inducing or enhancing an immune response.

75. (New) The method of claim 74 wherein said immune response is selected from the group consisting of prophylactic vaccination, therapeutic vaccination, cellular immunity, humoral immunity, mucosal immunity, long-term immunity, and any combination thereof.

76. (New) A method of immunizing a mammal with an antigen for the preparation of a hybridoma for the production of a monoclonal antibody against said antigen, wherein said animal is immunized using the method of claim 57.